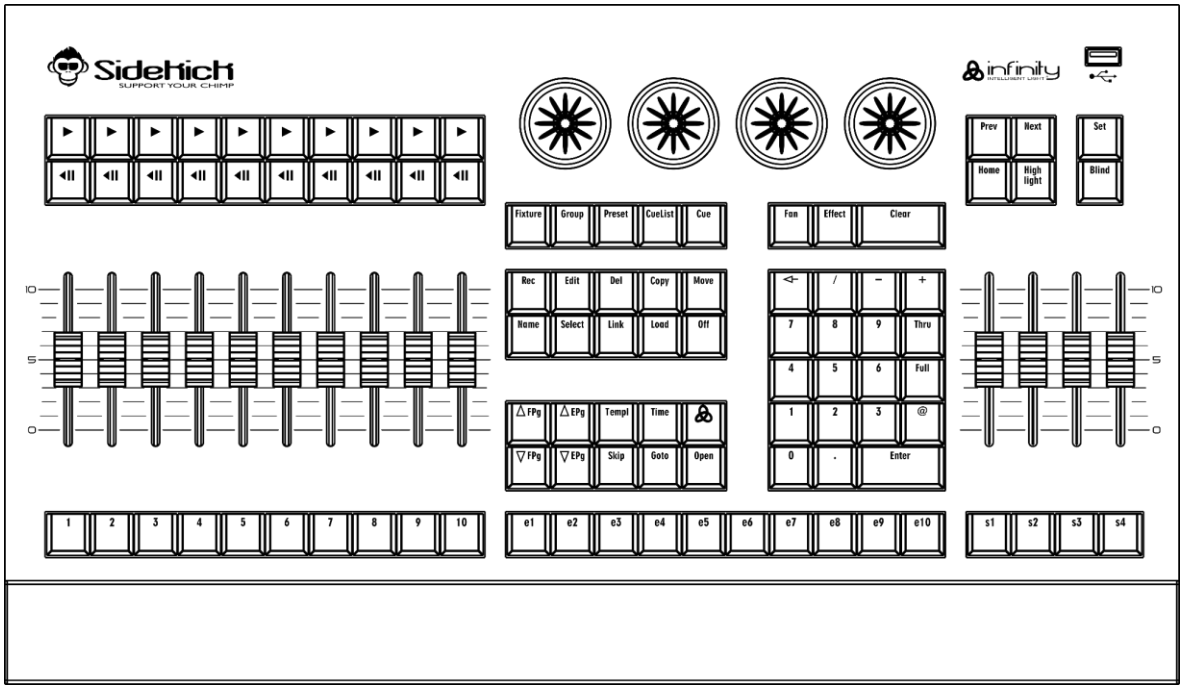
infinity
INTELLIGENT LIGHT®

USER MANUAL



ENGLISH

Sidekick V1

Product code: 55007

Preface

Thank you for purchasing this Infinity product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Intended and non-intended use of the device
- Installation and operation of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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Design and product specifications are subject to change without prior notice.

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Table of contents

1. Introduction 3
1.1. Before Using the Product 3
1.2. Intended Use 3
1.3. Product Lifespan 3
1.4. Text Conventions 3
1.5. Symbols and Signal Words 4
1.6. Symbols on the Information Label 4

2. Safety 5
2.1. Warnings and Safety Instructions 5
2.2. Requirements for the User 6

3. Description of the Device 7
3.1. Front View 7
3.2. Back View 7
3.3. Bottom View 8
3.4. Playback Faders 8
3.5. Programming Section 9
3.6. Executor Buttons 9
3.7. Special Faders 9
3.8. Product Specifications 10
3.9. Compatibility 11
3.10. Recommended Software 11
3.11. Dimensions 11

4. Installation 11
4.1. Installation Site Requirements 11

5. Setup 12
5.1. Warnings and Precautions 12
5.2. Setup Example 12
5.3. Supported Control Protocols 12
5.3.1. DMX Connection 13
5.3.1.1. DMX-512 Protocol 13
5.3.1.2. DMX Cables 13
5.3.2. Universe Numbering 14
5.3.3. SMPTE 15

6. Operation 16
6.1. Safety Instructions for Operation 16
6.2. Turning On/Off 16
6.3. Connecting to the Chimp OnPC 16
6.4. Control Modes 17

7. Troubleshooting 18

8. Maintenance 18
8.1. Preventive Maintenance 18
8.1.1. Basic Cleaning Instructions 18
8.2. Corrective Maintenance 19

9. Deinstallation, Transportation and Storage 19
9.1. Instructions for Deinstallation 19
9.2. Instructions for Transportation 19
9.3. Storage 19

10. Disposal 19

11. Approval 19

1. Introduction

1.1. Before Using the Product

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Infinity Sidekick
- User manual

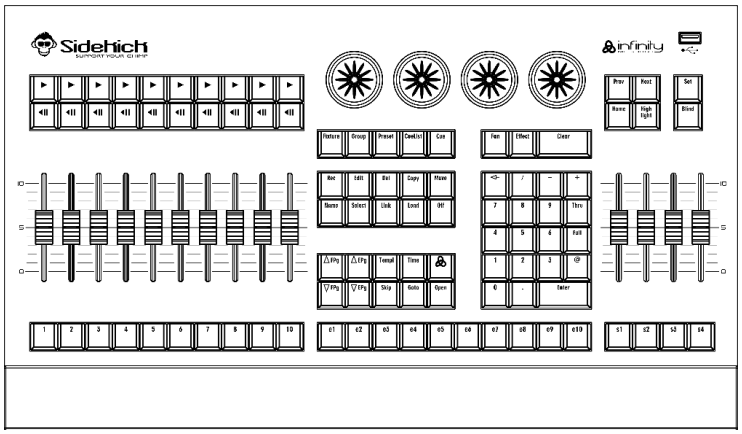


Fig. 01

1.2. Intended Use

This device is designed to be used as a keyboard for the Chimp OnPC. This device is not suitable for households.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Product Lifespan

This device is not designed for permanent operation. Do not switch on and off the device in short intervals. This will reduce the wear and will improve the device's lifespan.

1.4. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons and interface sliders and fields are in bold lettering, for example "Slide the **Strobe** slider", "Enter the DMX starting address in the **Address** field"
- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "set **the power switch (14)** to on position"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.5. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.

	DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	Attention	Indicates important information for the correct operation and use of the product.
	Important	Read and observe the instructions in this document.
		Provides important information about the disposal of this product.

1.6. Symbols on the Information Label

This product is provided with an information label. The information label is located on the backside of the device.

The information label contains the following symbols:

	This device shall not be treated as household waste.
	This device is designed for indoor use.
	Read and observe the instructions in the user manual.

2. Safety

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

2.1. Warnings and Safety Instructions

DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.

Attention
General safety

- Do not switch the device on and off in short intervals. This decreases the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.

Attention
This device shall be used only for the purposes it is designed for.

This device is designed to be used as a keyboard for the Chimp OnPC. This device is not suitable for households.

Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance and installation may be carried by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The Peanut Box is designed to be used as a keyboard for the Chimp OnPC. It expands your setup with 2 additional universes (Art-Net and sACN).

3.1. Front View

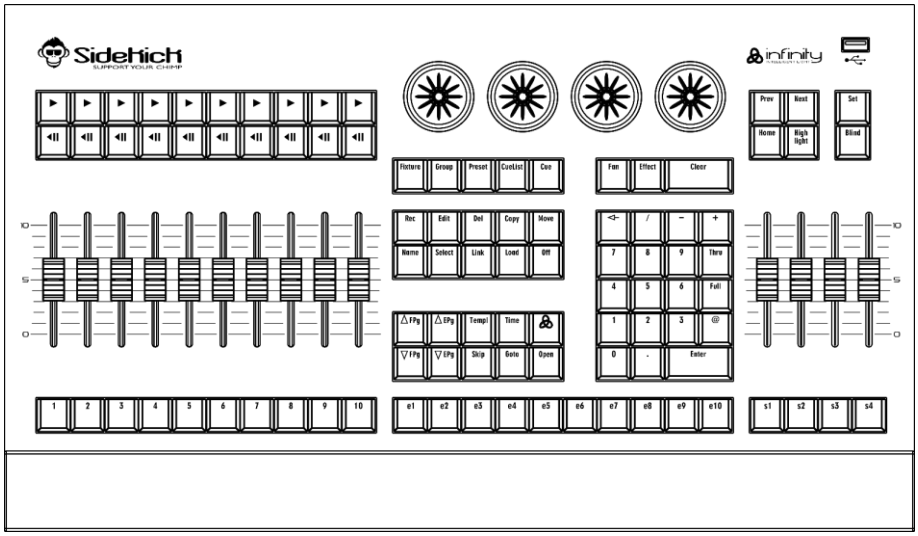


Fig. 02

3.2. Back View

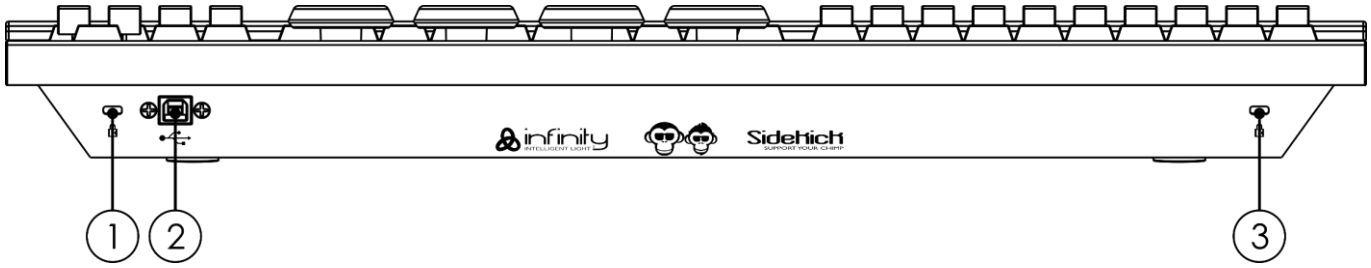


Fig. 03

01) Kensington lock port
02) USB-B connector IN
03) Kensington lock port

3.3. Bottom View

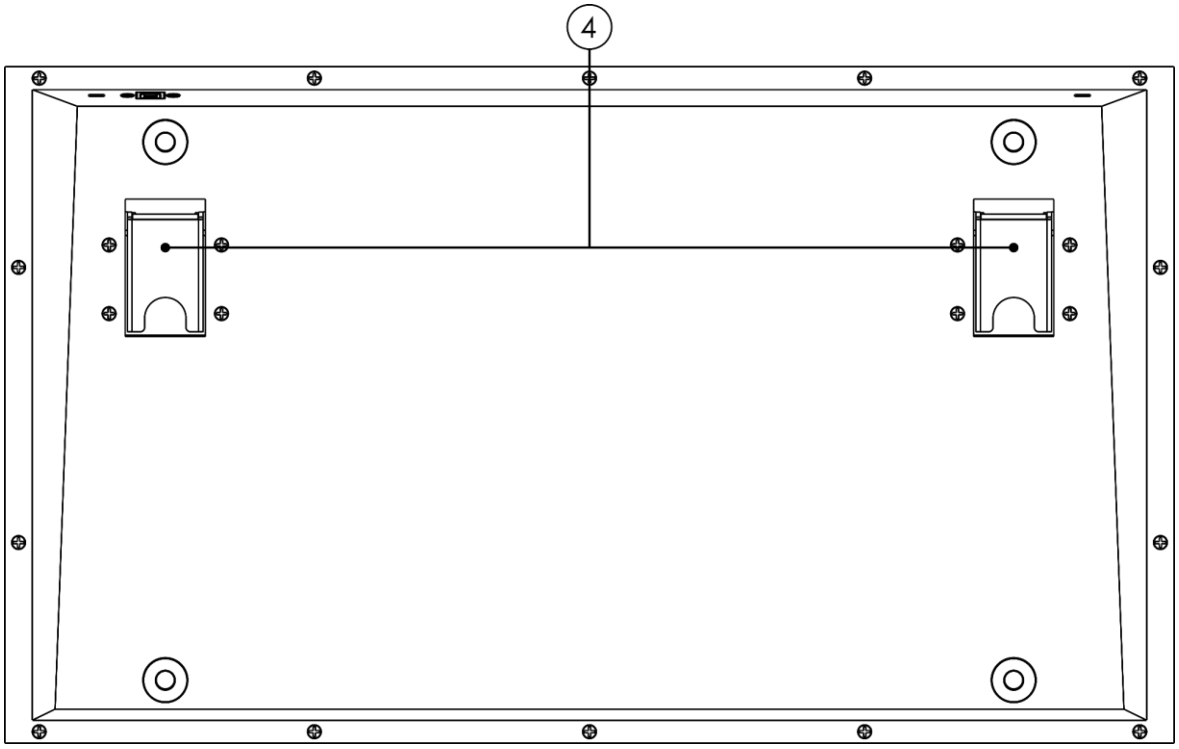


Fig. 04

04) 2 x foot stand

3.4. Playback Faders

The Sidekick's front panel consists of multiple playback fader controls, each consisting of a fader and flash, go and pause/back buttons. These may contain *Cuelists*, *Groups* or *Special* Masters, like Speedmasters. These are pageable and the button functions are assignable. The buttons below the faders are labelled 1 to 10.

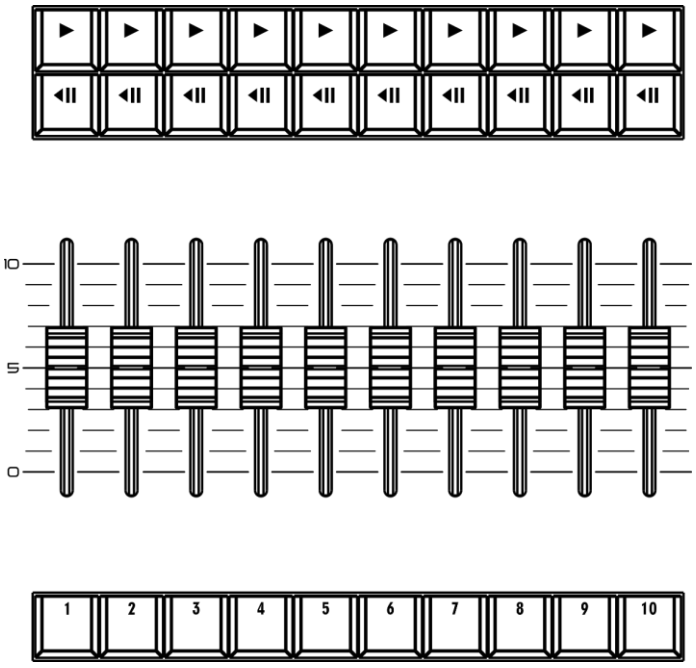


Fig. 05

3.5. Programming Section

This part of the Sidekick's front panel contains all keys needed for programming as well as all controls for value entry.

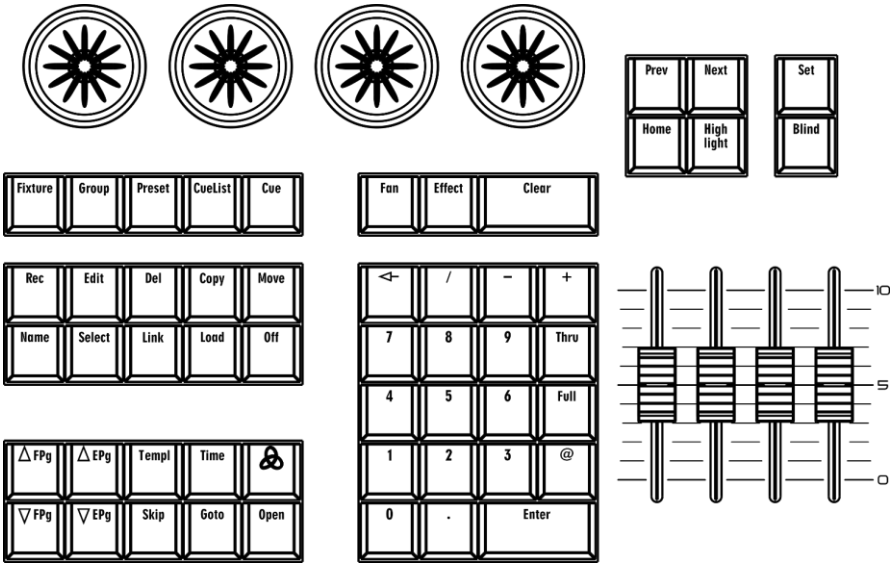


Fig. 06

3.6. Executor Buttons

These buttons may contain *Cuelists* or *Groups*. The Executors are pageable independently from the Playback Faders and they have assignable functions.

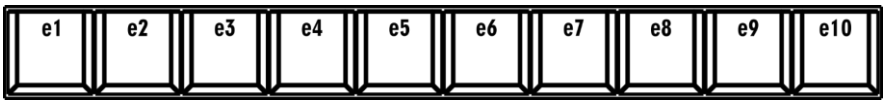


Fig. 07

3.7. Special Faders

This part of the Sidekick's front panel contains 4 special master fader controls, each consisting of a fader and a button. These may contain *Groups* or *Special Masters*, like Speedmasters.

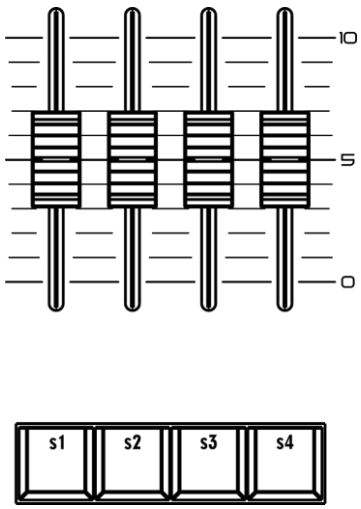


Fig. 08

3.8. Product Specifications

Model:	Sidekick

Electrical:	
Input voltage:	5 V DC via USB
Power consumption:	2,5 W

Physical:	
Dimensions:	510 x 295 x 90 mm (L x W x H)
Weight:	4,95 kg

Operation and control:	
Control:	DMX, PC software
DMX channels:	1024
Universes:	2
Power connector IN:	USB-B
Data connector IN:	USB-A
Faders:	14
OSC (Open Sound Control):	Yes
Control protocols:	sACN, Art-Net, SMPTE timecode (optional)

Construction:	
Housing:	Metal
Color:	Black
IP rating:	IP20

Thermal:	
Ambient temperature t_a:	From -5 °C to 40 °C

3.9. Compatibility

Attention
The Sidekick is designed to be operated ONLY with the Chimp OnPC software.

3.10. Recommended Software

You can download Chimp OnPC software from our website www.highlite.com.

3.11. Dimensions

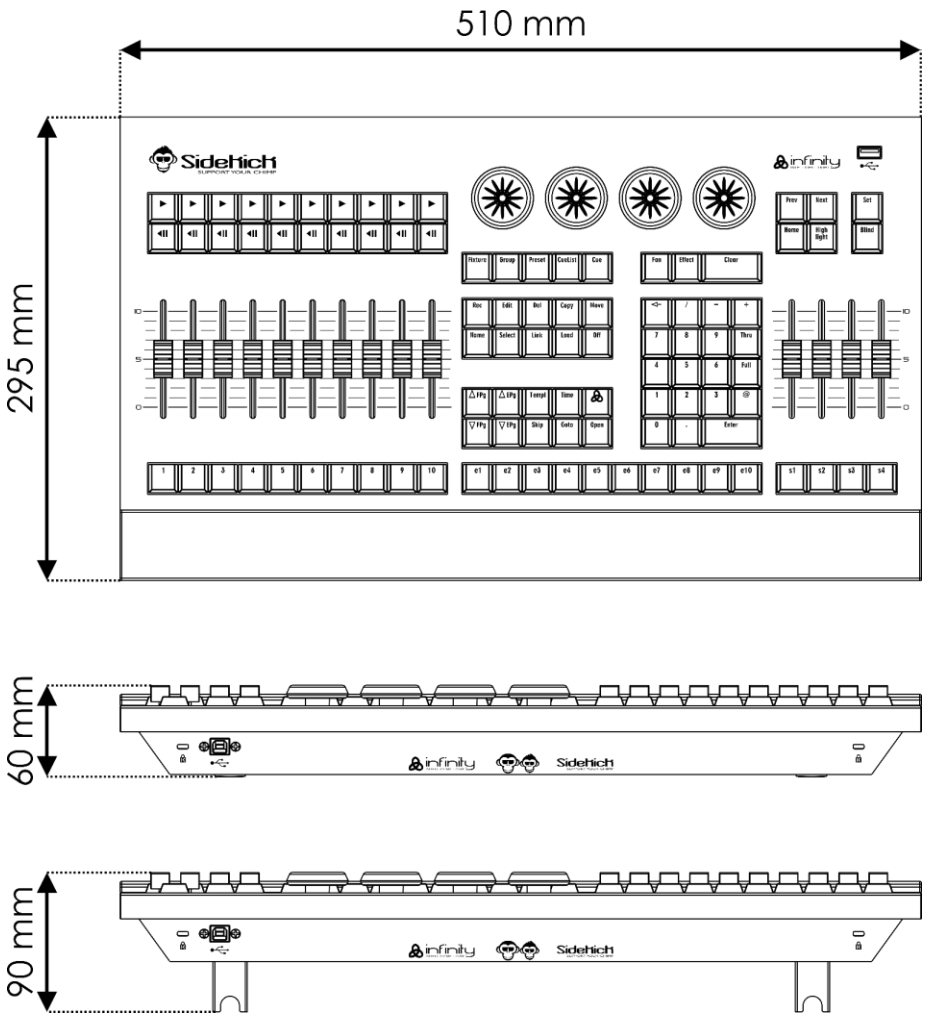


Fig. 09

4. Installation

4.1. Installation Site Requirements

- The device can be used only indoors.
- The device can be positioned on a flat surface.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature ta = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

5. Setup

The Sidekick functions as a keyboard for the Chimp OnPC. It can be used only with a PC with Chimp OnPC software installed.

5.1. Warnings and Precautions

Attention
Connect all data cables before supplying power.
Disconnect power supply before connecting or disconnecting data cables.

5.2. Setup Example

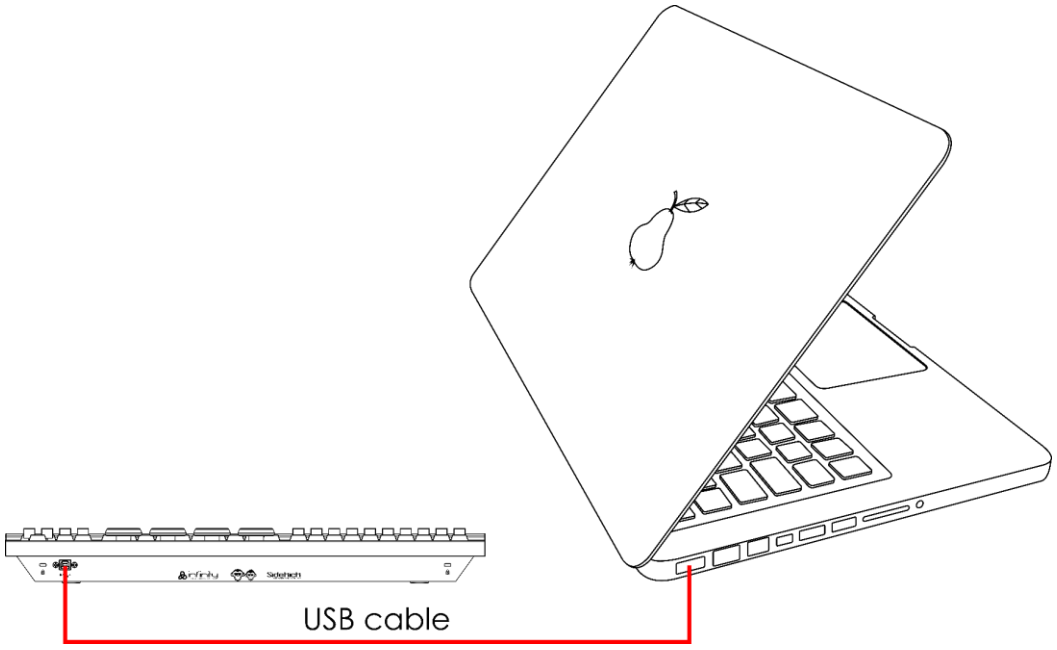


Fig. 10

5.3. Supported Control Protocols

The Sidekick supports DMX via Art-Net, sACN and SMPTE timecode.

Art-Net is a protocol that uses TCP/IP to transfer large amount of DMX-512 data over an Ethernet network. Art-Net 4 can support up to 32768 universes. Art-Net™ Designed by and Copyright Artistic Licence Holdings Ltd.
sACN (streaming Architecture for Control Networks), also known as ANSI E1.31, is a protocol for sending DMX-512 data over IP networks developed by ESTA (Entertainment Services and Technology Association). It supports up to 63999 universes and uses multicasting.
SMPTE timecode is a set of standards to label frames of video with a timecode. The system is developed by SMPTE (Society of Motion Picture and Television Engineers). SMPTE timecode is typically represented in 32 bits using binary-coded decimal.

5.3.1. DMX Connection

5.3.1.1. DMX-512 Protocol

You need a DMX serial data link to run light shows of one or more devices using the Sidekick and Chimp OnPC software.

Devices on a serial data link must be daisy-chained in a single line. The number of devices that you can control on one data link is limited by the combined number of the DMX channels of the connected devices and the 512 channels available in one DMX universe.

To comply with the TIA-485 standard, no more than 32 devices should be connected on one data link. In order to connect more than 32 devices on one data link, you must use a DMX optically isolated splitter/booster, otherwise this may result in deterioration of the DMX signal.

Note:

- Maximum recommended DMX data link distance: 300 m
- Maximum recommended number of devices on a DMX data link: 32 devices

5.3.1.2. DMX Cables

Shielded twisted-pair cables with 5-pin XLR connectors must be used for reliable DMX connection. You can purchase DMX cables directly from your Highlite International dealer or make your own cables.

If you use XLR audio cables for DMX data transmission, this may lead to signal degradation and unreliable operation of the DMX network.

When you make your own DMX cables, make sure that you connect the pins and wires correctly as shown in Fig. 11.

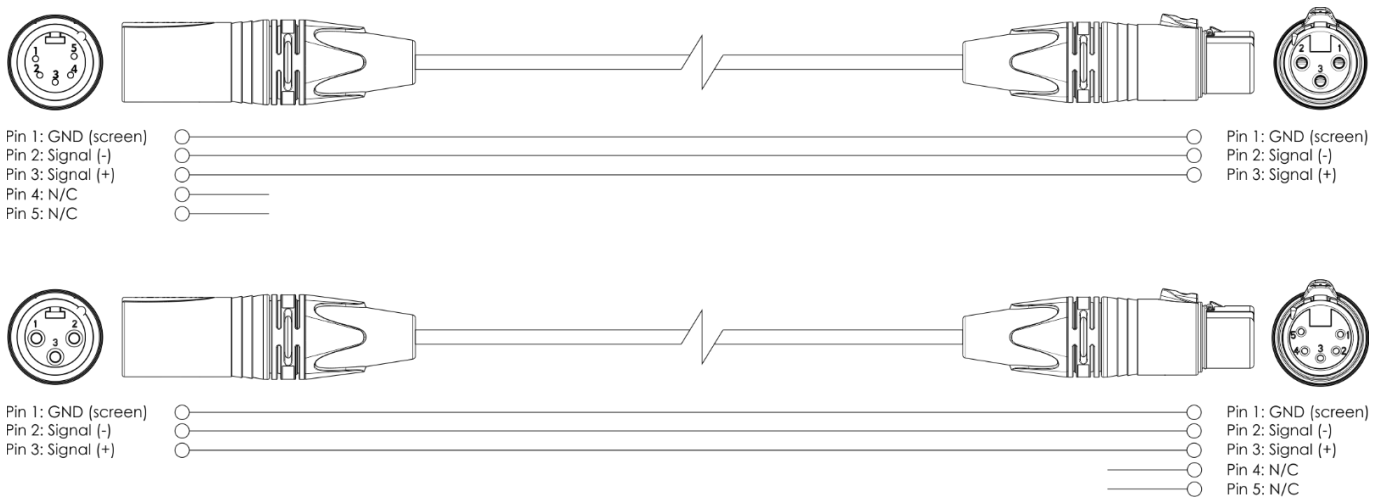


Fig. 11

5.3.2. Universe Numbering

The number of devices that you can control on one data link is limited by the combined number of the DMX channels of the connected devices and the 512 channels available in one DMX universe.

After the limit of 512 channels is reached, the next device should be set to a universe with a higher number.

There are 512 channels (1–512) in one universe. 16 consecutive universes (0–15) make up one sub-net. 16 sub-nets (0–15) make up one net. There are in total 128 nets (0–127).

Note:

- In Art-Net, universes are called Port Address and number from 0 to 32767. There are 32768 unique numbers.
- In sACN, universes number from 1 to 63999. There are 63999 unique numbers. The values of 0 and 64000 to 65535 are reserved for future expansion according to the standard.

15-bit Port Address	Net (0–127)	Sub-net (0–15)	Universe (0–15)
0	0	0	0
1	0	0	1
2	0	0	2
...	...	...	...
31	0	1	15
32	0	2	0
33	0	2	1
...	...	...	...
126	0	7	14
127	0	7	15
128	0	8	0
...	...	...	...
255	0	15	15
256	1	0	0
257	1	0	1
...	...	...	...
32766	127	15	14
32767	127	15	15

Note:

If you are using an Art-Net controller that supports Art-Net I or Art-Net II, the Art-Net net must be set to 0. The net number is available in Art-Net 3 and higher versions of the Art-Net protocol.

5.3.3. SMPTE

SMPTE time is coded with Binary Coded Decimal. Four bits are assigned to every tenth decimal numeral. The first 26 bits in each frame are assigned to the time information. Then, there are 32 bits of user data and the synchronization word (final 16 bits). The synchronization word is to identify the frame's boundaries and is: 0011 1111 1111 1101.

MIDI (Musical Instrument Digital Interface) is an interface used when working with different data formats. One of the ways it can work with time is called MTC (MIDI Time Code).

The MIDI time code message consists of 32 bits (the last 8 bits are unused or are set to 0). Each Time Code component is coded by one byte.

Byte 0
0rrhhhhh: Rate (0–3) and hour (0–23).
rr=00: 24 fps
rr=01: 25 fps
rr=10: 29.99 fps
rr=11: 30 fps

Byte 1
00mmmmmm: Minute (0–59)

Byte 2
00ssssss: Second (0–59)

Byte 3
000fffff: Frame (0–30)

When time code is repeated, it is divided into 8 x 4-bit pieces and one part is transmitted by every quarter frame. Each quarter frame has the byte status of 0xF1. There are 7 data bits (3 bits are the quarter frame identifiers and 4 bits contain the time portion).

Piece	Data byte	Explanation
0	0000 ffff	Frame number lsbits
1	0001 000f	Frame number msbit
2	0010 ssss	Second lsbits
3	0011 00ss	Second msbits
4	0100 mmmm	Minute lsbits
5	0101 00mm	Minute msbits
6	0110 hhhh	Hour lsbits
7	0111 0rrh	Rate and hour msbit

The time expands with the transmission of a single SMPTE frame, that takes place in 2 frames (8 x ¼). While mapping SMPTE to MTC, every second frame will be in MIDI time code. In takes for the master device about 2–4 frames to process this data, depending on when the scan begins.

6. Operation

6.1. Safety Instructions for Operation

Attention
This device must be used only for the purposes it is designed for.

This device is designed to be used as a keyboard for the Chimp OnPC. It can be used only with a PC with Chimp OnPC software installed. This device is not suitable for households.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

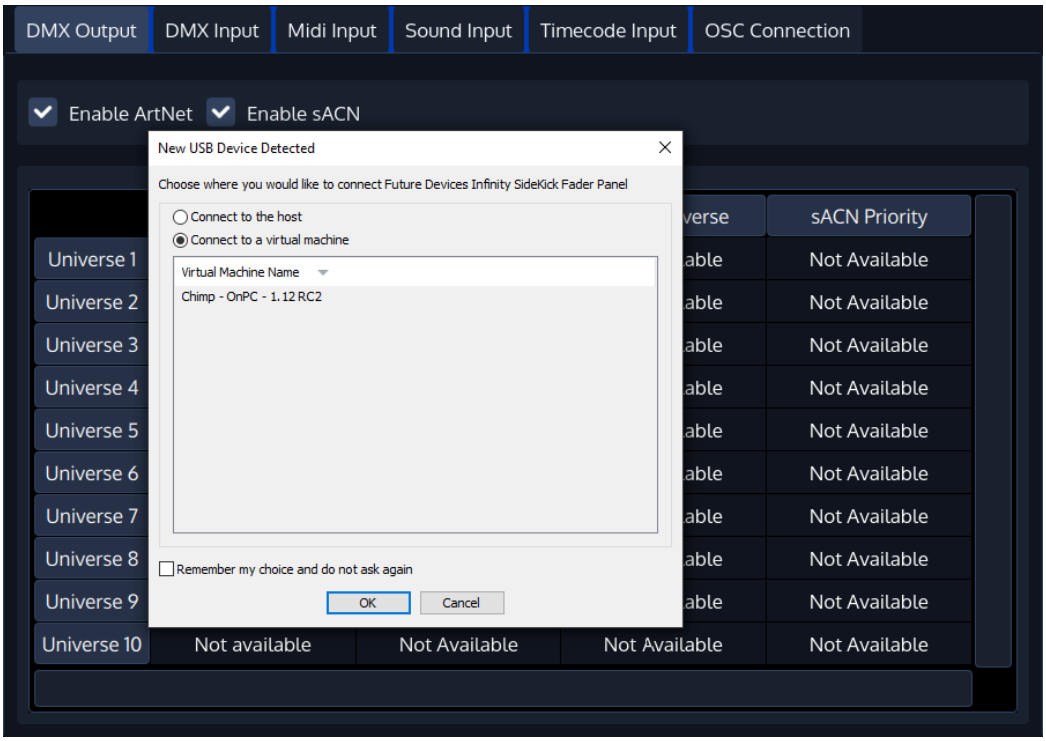
6.2. Turning On/Off

To turn the device on, use a USB cable to connect the **USB connector (02)** on the Sidekick with the USB connector on your PC (with Chimp OnPC software installed).

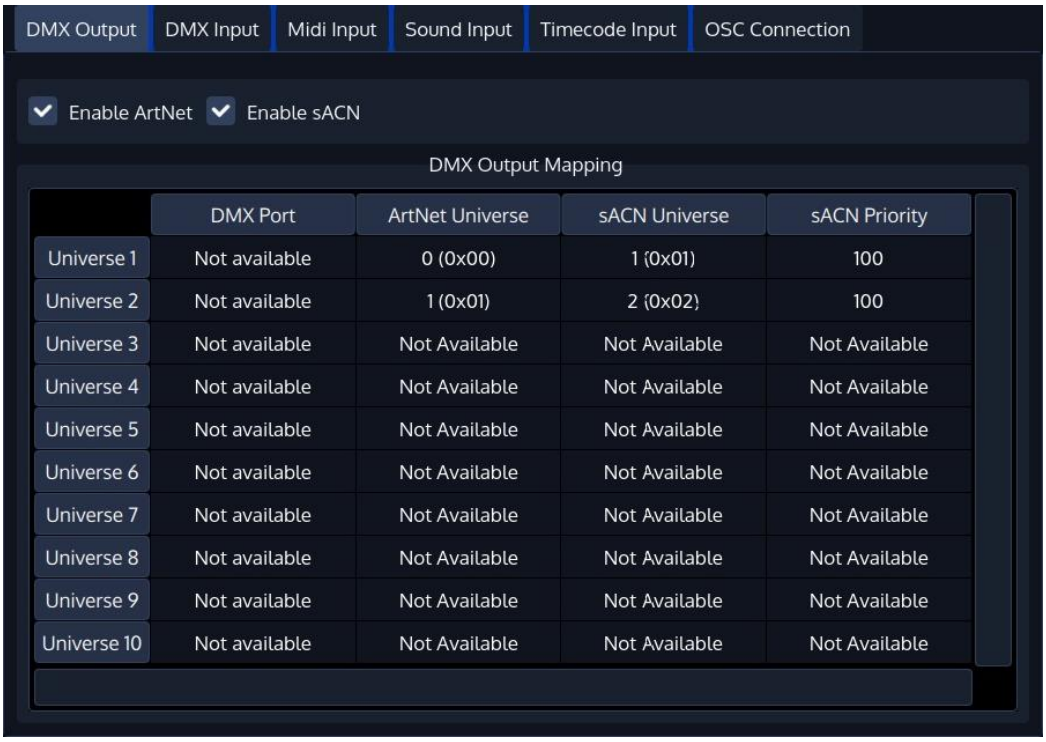
6.3. Connecting to the Chimp OnPC

The Sidekick needs to be connected to the Chimp OnPC and activated before it becomes functional.

01) Use a USB cable to connect the **USB connector (02)** on the Sidekick with the USB connector on your PC (with Chimp OnPC software installed). The PC screen will show:



02) Select “Connect to a virtual machine“ and click on “OK” to confirm. The PC screen will show:



	DMX Port	ArtNet Universe	sACN Universe	sACN Priority
Universe 1	Not available	0 (0x00)	1 (0x01)	100
Universe 2	Not available	1 (0x01)	2 (0x02)	100
Universe 3	Not available	Not Available	Not Available	Not Available
Universe 4	Not available	Not Available	Not Available	Not Available
Universe 5	Not available	Not Available	Not Available	Not Available
Universe 6	Not available	Not Available	Not Available	Not Available
Universe 7	Not available	Not Available	Not Available	Not Available
Universe 8	Not available	Not Available	Not Available	Not Available
Universe 9	Not available	Not Available	Not Available	Not Available
Universe 10	Not available	Not Available	Not Available	Not Available

The Sidekick is active and the Chimp OnPC recognizes 2 additional DMX universes.

6.4. Control Modes

Please refer to the user manual of the Chimp 100 or Chimp 300 for detailed and up-to-date information about the available control modes. The Sidekick’s functions are similar to those of the Chimp.

The user manuals for both Chimp consoles can be downloaded here:

Product code: 55004 (Inifinity Chimp 100.G2)
Product code: 55014 (Inifinity Chimp 300.G2)

7. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all and/or the device does not appear on the list of available devices on the PC screen)	The device is not properly connected to the PC	• Check if the USB cable is properly connected to the PC • Replace the USB cable

8. Maintenance

8.1. Preventive Maintenance

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- There are no deformations on housings, fixations and installation points.

8.1.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Remove the dust collected on the external surface with a soft brush.

Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.
- Make sure that the connections are fully dry before connecting the device to the power supply and to other devices.

8.2. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation

If trussing systems are used, deinstallation must be carried out only by instructed or skilled persons.

- Always observe the national and site-specific regulations during deinstallation and derigging of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

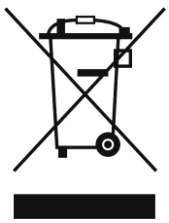
9.2. Instructions for Transportation

- Use the original packaging to transport the device, if possible.
- Always observe the handling instructions printed on the outer carton box, for example: "Handle with care", "This side up", "Fragile".

9.3. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter **8.1.1. Basic Cleaning Instructions** on page 18.
- Store the device in the original packaging, if possible.

10. Disposal



Correct disposal of this product

Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

11. Approval

CE

UK CA

Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.

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